

Michigan Department of Community Health

Health Facilities Engineering Section Lewis Cass Building - 3rd Floor 320 S. Walnut Street Lansing, MI 48913

MDCH REQUIREMENTS - EMERGENCY FUEL AND WATER SUPPLY FOR HOSPITALS

BACKGROUND

Hospitals are now investigating the removal and possible replacement of underground storage tanks for standby fuel for boilers, because of the age of the tanks and the associated environmental liability.

Several hospitals have inquired about MDCH requirements for emergency fuel and water supply as required by the Medicare Conditions of Participation (Condition 482.41), which states "There must be facilities for emergency gas and water supply." The following is a clarification of these requirements:

CLARIFICATION

1. Emergency Generator

For existing generator sets/hospitals sufficient fuel must be provided on-site to provide for peak demand over a 24-hour period. For new generator sets/hospitals located in southern Michigan the requirement is increased to 72 hours worth of fuel. (Refer to the 1996 versions of NFPA 101 and 110 as well as 1996 BOCA). The capacities of on-site fuel storage facilities must be increased to also accommodate boiler peak demand loads for the same required time periods if the boilers use the same on-site fuel storage facilities for back-up fuel. The 2007 Minimum Design Standards requires 72 hours of on-site fuel storage capacity for hospitals.

2. Boilers

Although the 1998 Minimum Design Standards document is silent on any requirement for the storage of emergency fuel for heating system boilers and domestic hot water needs, hospitals have provided a back-up fuel supply, normally diesel fuel, in underground storage tanks on the site. When hospital heating and hot water needs are provided by steam from a utility distribution network, no standby on-site fuel storage will be necessary. MDCH will accept natural gas as the only fuel for hospital boilers under the following conditions:

a. The hospital shall have available for review an agreement with a reliable source for an alternate fuel, to provide standby fuel during emergency conditions (when the primary supply of fuel has been interrupted).



Michigan Department of Community Health

Health Facilities Engineering Section Lewis Cass Building - 3rd Floor 320 S. Walnut Street Lansing, MI 48913

MDCH REQUIREMENTS - EMERGENCY FUEL AND WATER SUPPLY FOR HOSPITALS

- b. The hospital shall provide all necessary connections to ensure that the alternate fuel can be readily accommodated in the case of an emergency when the primary fuel is not available, including conversion burners on a sufficient number of boiler units to provide standby boiler heating capacity if one of the boilers must be shut down for repairs or maintenance.
- c. The <u>2007 Minimum Design Standards</u> requires 72 hours of on-site fuel storage capacity for hospitals.

3. Emergency Water Supply

When a facility is served by a community water system, at least two service lines shall be provided to the facility. These water lines shall be valved so that water will continue to be provided to the hospital in the event of disruption of the water line on one side of the valve. An approved well can **not** be an acceptable secondary source of water.

4. Underground Utilities

All underground utilities should be located sufficiently remote enough from one another such that a disruptive incident to one would not be anticipated to affect the others.

Authority: Act 368, P.A. 1978

BHS/HFS-517 (1/93) Updated and Reprinted 06/13/07